

ABSTRACT

A method for producing gold nanoparticles is disclosed. When gold salt solution is mixed with an adsorbent, gold in the form of complexes is adsorbed onto the surface of the adsorbent. The gold-loaded adsorbent, after being separated from the solution by screening, filtration, settling or other methods, is ashed to form ashes. The ashes contain gold nanoparticles and impurities such as oxides of sodium, potassium and calcium. The impurities can be removed by dissolution using dilute acids. The relatively pure gold nanoparticles are obtained after the impurities are removed. Activated carbon or gold-adsorbing resin can be used as the adsorbent. Silver or platinum group metal nanoparticles can also be produced by this method.